

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2022-0981; Project Identifier MCAI-2022-00032-T; Amendment

39-22285; AD 2022-26-06]

RIN 2120-AA64

Inc.) Airplanes

Airworthiness Directives; Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier,

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is adopting a new airworthiness directive (AD) for certain Airbus Canada Limited Partnership Model BD-500-1A10 and BD-500-1A11 airplanes. This AD was prompted by reports of flight control (horizontal stabilizer, rudder, and elevator) decals degrading and peeling (damage), reports of operators painting over these decals, and reports that procedures to replace these decals were inaccurate, potentially causing incorrect positioning of replacement decals. This AD requires inspecting the left and right horizontal stabilizer decals for visibility and damage; and for certain airplanes, inspecting the rudder and left and right elevator decals for visibility and damage; and doing applicable corrective actions; as specified in a Transport Canada AD, which is incorporated by reference. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES:

AD Docket: You may examine the AD docket at regulations.gov under Docket

No. FAA-2022-0981; or in person at Docket Operations between 9 a.m. and 5 p.m.,

Monday through Friday, except Federal holidays. The AD docket contains this final rule,
the mandatory continuing airworthiness information (MCAI), any comments received,
and other information. The address for Docket Operations is U.S. Department of
Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140,
1200 New Jersey Avenue SE, Washington, DC 20590.

Material Incorporated by Reference:

- For material incorporated by reference in this AD, contact Transport Canada, Transport Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5, Canada; telephone 888-663-3639; email AD-CN@tc.gc.ca; website tc.canada.ca/en/aviation.
- You may view this material at the FAA, Airworthiness Products Section,

 Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on
 the availability of this material at the FAA, call 206-231-3195. It is also available in the
 AD docket at regulations.gov under Docket No. FAA-2022-0981.

FOR FURTHER INFORMATION CONTACT: Gabriel Kim, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email gabriel.d.kim@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Airbus Canada Limited Partnership Model BD-500-1A10 and BD-500-1A11 airplanes. The NPRM published in the *Federal* Register on July 29, 2022 (87 FR 45709). The NPRM was prompted by AD CF-2022-01, dated January 7, 2022, issued by Transport Canada, which is the aviation authority for Canada (referred to after this as the MCAI). The MCAI states that flight control decals have been degrading and peeling, operators have been painting over these decals, and procedures to replace these decals were inaccurate, potentially causing incorrect positioning of replacement decals. An investigation determined that the degradation and peeling of the flight control decals were caused by an incorrect clear protective coating being applied during production, and that flight control decals were being painted over because of unclear in-service procedures. The in-service procedures were revised to clearly state that the flight control decals are to be masked prior to painting, and to ensure the flight control decals are properly placed. Flight control decals that are damaged or incorrectly positioned could introduce rigging offset of flight control surfaces, which, when combined with other failures or severe maneuvers, could result in loss of flight control surface effectiveness or structural loading that exceeds the airframe's capability. See the MCAI for additional background information.

In the NPRM, the FAA proposed to require inspecting the left and right horizontal stabilizer decals for visibility and damage; inspecting the rudder and left and right elevator decals for visibility and damage for certain airplanes; and doing applicable corrective actions.

You may examine the MCAI in the AD docket at regulations.gov under Docket No. FAA-2022-0981.

Discussion of Final Airworthiness Directive

Comments

The FAA received two comments from one commenter, Delta Air Lines (Delta).

The following presents the comments received on the NPRM and the FAA's response to each comment.

Request for Definition Clarification

Delta requested the final rule include a statement that clearly defines "refer to" and "in accordance with" to give operators a concise understanding of what steps must be complied with and what steps are recommended, done as part of other actions, or done with accepted methods different from those given in the listed instructions.

The FAA agrees to clarify the actions that are required for compliance in the service information referenced in the MCAI. In Parts A, B, C, and D of the service information referenced in the MCAI, some steps are required for compliance – or "RC" – and must be done following the instructions in the service information; other steps may be done using other approved methods chosen by the operator. The service information states that the Procedure section of the Accomplishment Instructions is RC and must be done to comply with the MCAI (and this AD), but the job set-up and job close-up sections, with the exception of the return-to-service tests, are recommended only. Therefore, the actions in the Procedure section are RC, but the job set-up and close-up sections are not. The FAA has not changed this AD as a result of this comment.

Request for Change in Sequence of Required Actions

Delta requested that the proposed AD be revised to include a statement that allows operators to perform the maintenance review tasks prior to accomplishing the inspection and replacement of the decals. The service information specified in the MCAI has the operator perform an inspection of the decals and then a maintenance record review to determine which actions to perform.

The FAA agrees with the request, provided all required corrective actions based on the results of the records review are accomplished as specified in the service information referenced in the MCAI. Operators may not need to repeat the inspections if the tasks in the maintenance record review accomplished the same task. The FAA has added paragraph (h)(3) of this AD to define this exception to the service information specified in the MCAI.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI referenced above. The FAA reviewed the relevant data, considered the comments received, and determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on this product. Except for minor editorial changes, and any other changes described previously, this AD is adopted as proposed in the NPRM. None of the changes will increase the economic burden on any operator.

Related Service Information Under 1 CFR Part 51

Transport Canada CF-2022-01 specifies procedures for inspecting the left and right horizontal stabilizer decals for visibility and damage, and corrective actions. For certain airplanes, Transport Canada CF-2022-01 specifies procedures for inspecting the rudder and left and right elevator decals for visibility and damage. The corrective actions include replacing, restoring, and preserving the condition and placement of the flight control decals, and re-rigging the rudder and elevator control surfaces. This material is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

The FAA estimates that this AD affects 56 airplanes of U.S. registry. The FAA estimates the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
10 work-hours X \$85 per hour = \$850	\$0	\$850	\$47,600

The FAA estimates the following costs to do any necessary on-condition actions that would be required based on the results of any required actions. The FAA has no way of determining the number of airplanes that might need these on-condition actions:

Estimated costs of on-condition actions

Labor cost	Parts cost	Cost per product
4 work-hours X \$85 per hour = \$340	\$220	\$560

The FAA has received no definitive data on which to base the cost estimates for the on-condition re-rigging actions specified in this AD.

The FAA has included all known costs in its cost estimate. According to the manufacturer, however, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected operators.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by

prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive: 2022-26-06 Airbus Canada Limited Partnership (Type Certificate Previously Held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.): Amendment

39-22285; Docket No. FAA-2022-0981; Project Identifier MCAI-2022-00032-T.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus Canada Limited Partnership (Type certificate previously held by C Series Aircraft Limited Partnership (CSALP); Bombardier, Inc.) Model BD-500-1A10 and BD-500-1A11 airplanes, certificated in any category, as identified in Transport Canada AD CF-2022-01, dated January 7, 2022 (Transport Canada AD CF-2022-01).

(d) Subject

Air Transport Association (ATA) of America Code: 11, Placards and markings.

(e) Unsafe Condition

This AD was prompted by reports of flight control (horizontal stabilizer, rudder, and elevator) decals degrading and peeling (damage), reports of operators painting over these decals, and reports that procedures to replace these decals were inaccurate, potentially causing incorrect positioning of replacement decals. The FAA is issuing this AD to address flight control decals that are damaged or incorrectly positioned, which could introduce rigging offset of flight control surfaces, and when combined with other failures or severe maneuvers, could result in loss of flight control surface effectiveness or structural loading that exceeds the airframe's capability.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Requirements

Except as specified in paragraph (h) of this AD: Comply with all required actions and compliance times specified in, and in accordance with, Transport Canada AD CF-2022-01.

(h) Exceptions to Transport Canada AD CF-2022-01

- (1) Where Transport Canada AD CF-2022-01 refers to its effective date, this AD requires using the effective date of this AD.
- (2) Where Transport Canada AD CF-2022-01 refers to "hours air time," this AD requires using "flight hours."
- (3) Where the service information referenced in Transport Canada AD CF-2022-01 specifies to inspect the decals and then perform a maintenance record review to determine the course of action, this AD allows the maintenance records review to be done first, and conditional actions, if any, are subsequently required, depending on the results of that records review.

(i) Additional FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, New York ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or responsible Flight Standards Office, as appropriate. If sending information directly to the manager of the certification office, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the responsible Flight Standards Office.
 - (2) Contacting the Manufacturer: For any requirement in this AD to obtain

instructions from a manufacturer, the instructions must be accomplished using a method approved by the Manager, New York ACO Branch, FAA; or Transport Canada; or Airbus Canada Limited Partnership's Transport Canada Design Approval Organization (DAO). If approved by the DAO, the approval must include the DAO-authorized signature.

(3) Required for Compliance (RC): Except as required by paragraph (i)(2) of this AD, if any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(j) Additional Information

For more information about this AD, contact Gabriel Kim, Aerospace Engineer, Mechanical Systems and Administrative Services Section, FAA, New York ACO Branch, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; telephone 516-228-7300; email gabriel.d.kim@faa.gov.

(k) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.
 - (i) Transport Canada AD CF-2022-01, dated January 7, 2022.

(ii) [Reserved]

(3) For Transport Canada AD CF-2022-01, contact Transport Canada, Transport

Canada National Aircraft Certification, 159 Cleopatra Drive, Nepean, Ontario K1A 0N5,

Canada; telephone 888-663-3639; email AD-CN@tc.gc.ca; website

tc.canada.ca/en/aviation.

(4) You may view this material at the FAA, Airworthiness Products Section,

Operational Safety Branch, 2200 South 216th St., Des Moines, WA. For information on

the availability of this material at the FAA, call 206-231-3195.

(5) You may view this material that is incorporated by reference at the National

Archives and Records Administration (NARA). For information on the availability of this

material at NARA, email fr.inspection@nara.gov, or go to: www.archives.gov/federal-

register/cfr/ibr-locations.html.

Issued on December 19, 2022.

Christina Underwood, Acting Director,

Compliance & Airworthiness Division,

Aircraft Certification Service.

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